controlling a selective [transmission] transfer device to input to a computer, control signals detected in [the] said at least one [or more] specific channels [designated by said processed datum];

controlling a computer to respond to control signals detected in [the] said at least one [or more specific channels] channel [designated by said processed datum];

controlling a television monitor to one of display video [or] and audio contained in [the] said at least one [or more specific channels] channel [designated by said processed datum];

controlling a video recorder to one of record [or] and play one of video [or] and audio contained in [the] said at least one [or more specific channels] channel [designated by said processed datum]; and

controlling a selective [transmission] transfer device to communicate to one of a storage device [or] and an output device [the] said at least one [or more specific channels] channel [designated by said processed datum].

REMARKS

The Office Action dated April 3, 1997 has been carefully reviewed. The Examiner's comments on the claims are acknowledged and appreciated. In response thereto, Applicants herein address the Examiner's rejections. Claims 2-41 have been carefully amended, and no new matter is presented in the amendments. Entry of same is respectfully requested. Thus, claims 2-41 are active in this application and early allowance is earnestly solicited.

Regarding paragraph 2 of the Office Action, Applicants respectfully point out that the Information Disclosure Statements filed for the subject application claim priority back to the application filed November 3, 1981, and issued as U.S. Pat. No. 4,694,490 on September 15, 1987. The present application claims priority under 35 U.S.C. § 120 to the following applications:

Serial No.	Filing Date	Patent No.
08/113,329	August 30, 1993	Pending
08/056,501	May 3, 1993	5,335,277
07/849,226	March 10, 1992	5,233,654
07/588,126	September 25, 1990	5,109,414
07/096,096	September 11, 1987	4,965,825
06/829,531	February 14, 1986	4,704,725
06/317,510	November 3, 1981	4,694,490

Consequently, Applicants will demonstrate disclosure only with respect to the "81 case", App. Ser. No. 06/317,510 and issued as U.S. Pat. No. 4,694,490. Applicants will address the art rejections and the double patenting rejections of the Office Action, *infra.*

As to the paragraph numbered 3, Applicants acknowledge their duty to maintain a line of patentable demarcation between related applications. Assuming *arguendo* that substantially duplicate claims exist, Applicants intend to make a good faith effort to alert the USPTO of any instances in which the USPTO treats such claims inconsistently.

As to the paragraph numbered 4, Applicants acknowledge and appreciate the Examiner's concern over the use of alternative claim language. Applicants believe that the disclosure supports every possible embodiment or permutation that can be created using said language. During the prosecution of this application, Applicants intend to

ensure that the disclosure supports each possible embodiment as claimed using alternative claims.

As to paragraphs 5 through 13 of the Office Action, Applicants' views are fully discussed in Applicants' reply brief to the rejections in application number 08/113,329, incorporated herein by reference. Applicants will not repeat portions of the response which are identical in this application. Applicants will discuss those portions of the double patenting rejection that are specific to the present application *infra.*

Concerning paragraph 10 of the Office Action, Applicants respectfully submit that the Examiner and the USPTO cannot defer further rejections to a later time. Every ground of rejection should be made in examiner's first Office Action. Title 37 of the C.F.R. states that "[o]n taking up an application for examination . . . the examiner shall make a thorough study thereof and shall make a thorough investigation of the available prior art relating to the subject matter of the claimed invention. The examination shall be complete with respect to both compliance of the application . . . with the applicable statutes and rules and to the patentability of the invention as claimed, as well as with respect to matters of form, unless otherwise indicated." 37 C.F.R. § 1.104(a). The M.P.E.P. states "[t]he examiner's action will be complete as to all matters, except that in appropriate circumstances, such as misjoinder of invention, fundamental defects in the application, and the like, the action of the examiner may be limited to such matters before action is made." M.P.E.P. § 707.07, quoting 37 C.F.R. § 1.105. Finally, "[p]iecemeal examination should be avoided as much as possible. The examiner ordinarily should reject each claim on all valid grounds available . . . Where a major technical rejection is proper, it should be stated with full development of reasons rather

than by mere conclusion coupled with some stereotyped expression." M.P.E.P. § 707.07(g). Applicants respectfully submit that the Examiner has a duty to give each application a complete examination, that rejections be made with specificity, and that deferred rejections are not allowed. For these reasons, Applicants likewise traverse the rejection based on the "judicially created doctrine of double patenting over the claims of copending U.S. application 08/113,329 and the following [list of all applicants copending applications]." Applicants submit that this rejection, even if appropriately made with specificity, should be a provisional double patenting rejection. Applicants respectfully request that this rejection be withdrawn.

As to paragraph 12 related to the multiplicity rejection in parent file 07/096,096, Applicants submit that the USPTO gave a multiplicity rejection in this case and limited Applicants to twenty-five claims. Roughly one hundred claims had been originally filed. There was no substantive review of any of the other claims outside of the twenty five. Applicants were not permitted to submit additional claims although a request was made. The disclosure of Applicants address too many subject areas to be adequately covered by a small number of claims. Applicant submit that "nexus" analysis is not required by Applicants.

Claims 2-41 are rejected under 35 U.S.C. § 112, second paragraph. Applicants traverse this rejection and submit they are under no duty to prospectively reference claim limitations to the specification where the Examiner has not specifically identified what is objected to as indefinite. M.P.E.P. § 2111 states that "[d]uring patent examination, the pending claims must be 'given the broadest reasonable interpretation consistent with the specification.'" Also, it is only "when the specification provides

definitions for terms appearing in the claims that the specification can be used in interpreting claim language." M.P.E.P. § 2111.01. Applicants respectfully request that this blanket rejection for indefiniteness be withdrawn.

However, in order to advance the prosecution of the present application. Applicants shall provide citations to the '81 case supporting the pending claims, as well as a cross-reference to corresponding sections of the '87 specification. (see, footnotes).

The present application asserts priority written description that is fully enabling based upon the disclosure of the '81 case, filed on November 3, 1981, as Ser. No. 317,510, and issued September 15, 1987, as U.S. Pat. No. 4,694,490. The disclosure of the '81 case is generally directly to apparatus and methods for automatically controlling the transmission and presentation of information programming, including the application of embedded signaling for a number of functions, including the control over decryption and access, monitoring of usage/availability, control of external equipment, coordination of multiple broadcasts, automated compilation and collection of billing data, and generation and presentation of combined media presentations of broadcast and locally-generated user specific content. The priority disclosure further discusses coordination and control of programming at several levels of the communications chain, including transmission stations, intermediate transmission stations, and receiver stations. Regarding the present invention, the claims are generally directed to a method of controlling a network that communicates a television signal. Independent claim 2 is directed at a method of processing signals at a receiver station. (See, e.g., U.S. Pat. No.

4,694,490, col. 19, line 30 through col. 20, line 10)[1]. Independent claim 6 is directed at a method of controlling a remote intermediate mass medium program transmitter station to communicate mass medium program material to a remote receiver station and controlling the remote receiver station to deliver an individualized mass medium program presentation. (See, e.g., U.S. Pat. No. 4,694,490, col. 19, line 30 through col. 20, line 10; col. 10, line 14 through col. 12, line 67)[2]. Independent claim 11 is directed at a method of controlling a remote intermediate transmitter station to communicate an instruct signal to a receiver station. (See, e.g., U.S. Pat. No. 4,694,490, col. 19, line 30 through col. 20, line 10; col. 10, line 14 through col. 12, line 67)[3]. Independent claims 14 and 23 are directed at a method of controlling at least one of a plurality of receiver stations. (See, e.g., U.S. Pat. No. 4,694,490, col. 19, line 30 through col. 20, line 10; col. 10, line 14 through col. 12, line 67)[4]. Independent claim 19 is directed at a method of generating and encoding signals to control a presentation. (See, e.g., U.S. Pat. No. 4,694,490, col. 19, line 30 through col. 20, line 10; col. 19, lines 22-27; the paragraph beginning at col. 4, line 5; col. 11, lines 57-65)[5]. Independent claim 31 is directed at a

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[1] '490 col. 19, line 30 through col. 20, line 10 corresponds to '87 specification at pp. 427-447, 249-267 (line 18), 288-312, *see also* pp. 447-457, 19-28 and 86-248.

[2] '490 col. 19, line 30 through col. 20, line 10 corresponds to '87 specification at pp. 427-447, 249-267 (line 18), 288-312, *see also* pp. 447-457, 19-28 and 86-248; col. 10, line 14 through col. 12, line 67 corresponds to '87 specification at pp. 324-390.

[3] '490 col. 19, line 30 through col. 20, line 10 corresponds to '87 specification at pp. 427-447, 249-267 (line 18), 288-312, *see also* pp. 447-457, 19-28 and 86-248; col. 10, line 14 through col. 12, line 67 corresponds to '87 specification at pp. 324-390.

[4] '490 col. 19, line 30 through col. 20, line 10 corresponds to '87 specification at pp. 427-447, 249-267 (line 18), 288-312, *see also* pp. 447-457, 19-28 and 86-248; col. 10, line 14 through col. 12, line 67 corresponds to '87 specification at pp. 324-390.

[5] '490 col. 19, line 30 through col. 20, line 10 corresponds to '87 specification at pp. 427-447, 249-267 (line 18), 288-312, *see also* pp. 447-457, 19-28 and 86-248; col. 19, lines 22-27 corresponds to '87 specification at p.

method for multimedia programming promotion and delivery for use with an interactive mass medium program output apparatus. (See, e.g., U.S. Pat. No. 4,694,490, col. 19, line 30 through col. 20, line 10; col. 20, lines 16-68)[6]. Independent claim 35 is directed at a method for promotion and delivery of computer instructions for use with an interactive mass medium program output apparatus. (See, e.g., U.S. Pat. No. 4,694,490, col. 19, line 30 through col. 20, line 10; col. 20, lines 16-68)[7]. Independent claim 38 is directed at a method of controlling a receiver station. (See, e.g., U.S. Pat. No. 4,694,490, col. 19, line 30 through col. 20, line 10; col. 19, lines 9-29)[8]. Applicants provide these specific embodiments in support of the pending claims by way of example only. The claims must be read as broadly as is reasonable in light of the specification, and Applicants in no way intend that their submission of excerpts/examples be construed to unnecessarily restrict the scope of the claimed subject matter.

Accordingly, Applicants respectfully request reconsideration and withdrawal of the 35 U.S.C. § 112 , second paragraph, rejection of claims 2-41.

Claim 17, line 2 has been corrected grammatically. Claim 35, line 12 has been corrected to recite " ... receiving a reply ...". Accordingly, Applicants respectfully

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445; the paragraph beginning at col. 4, line 5 corresponds to '87 specification at pp. 13-14, 16, 463, 516-533, *see also* pp. 40-43; col. 11, lines 57-65 correspond to '87 specification at pp. 324-390.

[6] '490 col. 19, line 30 through col. 20, line 10 corresponds to '87 specification at pp. 427-447, 249-267 (line 18), 288-312, *see also* pp. 447-457, 19-28 and 86-248; col. 20, lines 16-68 correspond to '87 specification at pp. 469-478, *see also* pp. 463-469, and 478-516.

[7] '490 col. 19, line 30 through col. 20, line 10 corresponds to '87 specification at pp. 427-447, 249-267 (line 18), 288-312, *see also* pp. 447-457, 19-28 and 86-248; col. 20, lines 16-68 correspond to '87 specification at pp. 469-478, *see also* pp. 463-469, and 478-516.

[8] '490 col. 19, line 30 through col. 20, line 10 corresponds to '87 specification at pp. 427-447, 249-267 (line 18), 288-312, *see also* pp. 447-457, 19-28 and 86-248; col. 19, lines 9-29 correspond to '87 specification at pp. 419-447, 249-267 (line 18), 288-312, *see also* 447-457, 19-28, and 86-248.

request reconsideration and withdrawal of the objection to claims 17 and 35.

Claims 2-5 , 11-18, and 23-30 are rejected under 35 U.S.C. § 112, second paragraph. Accordingly, claim 5, line 1, has been amended to replace "playing ... " with "retrieving said at least one of a television, radio, print and multimedia program from said programming storage source ... ".

Claim 2 has been amended to recite " ... a first receiver specific datum ..." and " ... said first receiver specific datum ... ".

Claim 11 has been amended to recite " ... at least one instruct signal ... " " ... said at least one instruct signal ...", " ... said transmitter ... ", " ... at least one control signal ... " and " ... said at least one control signal ... ".

Claim 14 has been amended to recite " ... plurality of receiver stations ... " and " ... said plurality of receiver stations ... ", " ... at least one control signal ... " and " ... said at least one control signal ... ".

Claim 23 has been amended to recite " ... at least one control signal ... " and " ... said at least one control signal ... ", and " ... said transmitter ... ".

Claim 26 has been amended to recite " ... said transmitter ... " and " ... plurality of receiver stations ... " and " ... said plurality of receiver stations ... ".

Claim 27 has been amended to recite " ... said transmitter ... ".

Claim 28 has been amended to recite " ... said plurality of receiver stations ... ".

Accordingly, Applicants respectfully request that the Examiner reconsider and withdraw the 35 U.S.C. § 112, second paragraph rejection of claims 2-5, 11-18 and 23-30.

Claims 2-8, 10-16, 18-24, 26-28, 30-33 and 38-41 are rejected under 35 U.S.C. § 102(e) as being anticipated by Campbell et al. (Campbell). As an initial matter,

Applicants respectfully submit that Campbell et al. is not prior art as against the present application under 35 U.S.C. § 102(e). According to 35 U.S.C. § 102(e), a person shall be entitled to a patent unless the invention was described in a patent granted on an application for patent by another filed in the United States before the invention of the Applicants. In the instant case, the U.S. filing date of Campbell et al. and the 102(e) date shown on the face of the patent, November 27, 1981 does not precede the asserted priority date of the present application, namely November 3, 1981.

Applicant's reading of 35 U.S.C. § 102(e) is that the earlier PCT filing date March 31, 1981 does not render Campbell et al. as prior art in this instance for purposes of this section of the Patent Statute. Assuming *arguendo* that Campbell et al. is a valid reference against the present application, concerning claim 2, Applicants respectfully submit that Campbell et al. fails to teach or disclose generating a receiver specific datum by processing information stored in a receiver station computer in response to a control signal.

Campbell et al. is directed to an addressable cable television control system which controls television program and data signal transmission from a central station to a plurality of user stations. The Campbell et al. system uses a head-end video processor (HVP) unit 53, addressable converters 40 which are located in a subscriber's home, and a programming control system (PCS) 50. Channel control data from the programming control system (PCS) 50 is processed to generate scrambler signals, program identification signals, tier signals, and eligibility code signals. These signals are utilized by each subscriber's converter 40 to determine the particular subscriber's authorization to receive each program and data. Campbell et al. 's program identification signals

merely identify to the subscriber if the broadcasted program is of a general category that the viewer is entitled to receive, but does not serve as an instruct signal that is passed to a computer. Instead, Campbell et al. signals are used for comparison with codes already present in the converter 40, such that is a proper comparison exists between the codes transmitted and the codes in the converter 40, the subscriber is permitted to view a particular program or data. However, the Campbell et al. system does not communicate a receiver specific datum to an output device that is delivering programming to a user. Thus, the Campbell et al. system does not generate such a receiver specific datum by processing information stored in a receiver station computer in response to a control signal. Instead, the Campbell et al. system merely permits viewing of a programs or data when a proper comparison is made between codes received and codes present in the converter 40. Therefore, there is no provision in the Campbell et al. system for generating a receiver specific datum, and there certainly is no teaching or disclosure as to how such a receiver specific datum would be used were one to be generated.

Hence, Applicants respectfully submit that the Campbell et al. system does not anticipates their claim 2 under 35 U.S.C. § 102(e). Therefore, Applicants respectfully request that the Examiner reconsider and withdraw this rejection. Claims 3-5, which depend from claim 2, are patentable for at least the reasons proffered with respect to claim 2. Thus, Applicants respectfully request that the Examiner reconsider and withdraw the 35 U.S.C. § 102(e) rejection of claims 3-5.

Concerning the rejection of claim 6, Applicants respectfully submit that Campbell et al. fails to teach or disclose receiving at a remote intermediate mass

medium transmitter station, an instruct signal which is operable in a remote receiver station to generate a receiver specific datum. As discussed above with respect to the rejection of claim 2, the Campbell et al. system does not generate a receiver specific datum. Instead, the Campbell et al. system merely permits viewing of programs or data when a proper comparison is made between codes received and codes present in the converter 40. Therefore, there is no provision for generating receiver specific datum is the Campbell et al. system.

Hence, Applicants respectfully submit that the Campbell et al. system does not anticipates their claim 6 under 35 U.S.C. § 102(e). Therefore, Applicants respectfully request that the Examiner reconsider and withdraw this rejection. Claims 7, 8 and 10, which depend from claim 6, are patentable for at least the reasons proffered with respect to claim 6. Thus, Applicants respectfully request that the Examiner reconsider and withdraw the 35 U.S.C. § 102(e) rejection of claims 7, 8 and 10.

Concerning the rejection of claim 11, Applicants respectfully submit that Campbell et al. does not teach or disclose receiving a control signal, which at a remote intermediate data transmitter station, controls communication of an instruct signal. The Campbell et al. system relies upon comparison codes which function in their converter 40 as a means for comparison in order to authorize viewing of transmitted programming and data. The comparison codes however, do not involve receiving at a remote intermediate data transmitter station, a control signal which operates to communicate an instruct signal. In fact, the Campbell et al. system sends from their head-end station, the comparison codes along with programming and data. There is no discussion in Campbell et al. of receiving control signals in a remote intermediate data

transmitter station, and the Campbell et al. converter 40 does not convey instruct signals to the subscriber's television set based upon any control signal. Thus, there is no provision in the Campbell et al. system concerning the a control signal which controls communication of an instruct signal.

Hence, Applicants respectfully submit that the Campbell et al. system does not anticipates their claim 11 under 35 U.S.C. § 102(e). Therefore, Applicants respectfully request that the Examiner reconsider and withdraw this rejection. Claims 12 and 13, which depend from claim 11, are patentable for at least the reasons proffered with respect to claim 11. Thus, Applicants respectfully request that the Examiner reconsider and withdraw the 35 U.S.C. § 102(e) rejection of claims 12 and 13.

Concerning the rejection of claim 14, Applicants respectfully submit that Campbell et al. does not teach or disclose receiving at a transmitter station, a control signal which is effective at a receiver station to identify or select an instruct signal. The Campbell et al. system calls for transmitting a plurality of category codes from the head-end to the subscriber, and the category codes are compared to control codes of a television signal. If the category codes and the control codes correspond, the subscriber is enabled to access the tuned television station. Channel control data describes the authorization that is required so that the converter 40 may gain access to the television program currently being transmitted on a selected channel. The format for the channel control data is in the form of a channel control word 200, which defines codes that are required for access to each television program being transmitted. The format for the subscriber addressing data is illustrated in the form of four subscriber addressing words 210, 220, 230 and 240, which all contain constituent codes that allow the

converter 40 to gain access to the system. However, such codes are not received at a transmitter station to identify or select an instruct signal, but instead serve merely as a means for comparison in the converter 40, whereupon in the case of a proper comparison, viewing by the subscriber of programming or data is permitted. Hence, Applicants respectfully submit that the Campbell et al. system does not anticipates their claim 14 under 35 U.S.C. § 102(e). Therefore, Applicants respectfully request that the Examiner reconsider and withdraw this rejection. Claims 15 and 16, which depend from claim 14, are patentable for at least the reasons proffered with respect to claim 14. Thus, Applicants respectfully request that the Examiner reconsider and withdraw the 35 U.S.C. § 102(e) rejection of claims 15 and 16.

Concerning the rejection of claim 18, which depends from claim 14, Applicants respectfully submit that claim 18 is patentable for at least the reasons proffered with respect to claim 14. Thus, Applicants respectfully request that the Examiner reconsider and withdraw the 35 U.S.C. § 102(e) rejection of claim 18.

Concerning the rejection of claim 19, Applicants respectfully submit that Campbell et al. fails to teach or disclose storing a control signal in conjunction with a program. The Campbell et al. system is discussed above with respect to the rejection of claim 2. There is no discussion by Campbell et al. of storing a control signal. Instead, their converter 40 has already stored therein codes, which when properly compared with codes that are transmitted, allow the subscriber to view programs and data. However, the Campbell et al. system does not call for storing a control signal in conjunction with a program. Hence, Applicants respectfully submit that the Campbell et al. system does not anticipates their claim 19 under 35 U.S.C. § 102(e). Therefore,

Applicants respectfully request that the Examiner reconsider and withdraw this rejection. Claims 20-23, which depend from claim 19, are patentable for at least the reasons proffered with respect to claim 19. Thus, Applicants respectfully request that the Examiner reconsider and with draw the 35 U.S.C. § 102(e) rejection of claims 20-23.

Concerning the rejection of claim 23, Applicants respectfully submit that Campbell et al. fails to teach or disclose receiving at a broadcast or a cablecast transmitter station an instruct signal, which is effective at a receiver station to generate a receiver specific datum for presentation in a specific type of programming presentation. As discussed above with respect to the rejection of claim 6, the Campbell et al. system does not offer receiver specific datum. Instead, when proper comparison of the codes exists, permits viewing of programming and data throughout the entire system. The codes are matched against codes present in the converter 40, such that when a proper comparison is made, the subscriber is permitted to view programs or data. Hence, Applicants respectfully submit that the Campbell et al. system does not anticipates their claim 23 under 35 U.S.C. § 102(e). Therefore, Applicants respectfully request that the Examiner reconsider and withdraw this rejection. Claims 24-28 and 30, which depend from claim 23, are patentable for at least the reasons proffered with respect to claim 23. Thus, Applicants respectfully request that the Examiner reconsider and withdraw the 35 U.S.C. § 102(e) rejection of claims 24-28 and 30.

Concerning the rejection of claim 31, Applicants respectfully submit that Campbell et al. fails to teach or disclose generating a receiver specific datum for presentation in a specific type of program presentation. As discussed above with respect to the rejection of claims 2 and 23, the converter 40 used by the Campbell et al.

system compares codes stored therein with signals transmitted from the head-end in order to permit the subscriber to view programming or data and does not offer receiver specific datum. Hence, Applicants respectfully submit that the Campbell et al. system does not anticipates their claim 31 under 35 U.S.C. § 102(e). Therefore, Applicants respectfully request that the Examiner reconsider and withdraw this rejection. Claims 32 and 33, which depend from claim 31, are patentable for at least the reasons proffered with respect to claim 31. Thus, Applicants respectfully request that the Examiner reconsider and with draw the 35 U.S.C. § 102(e) rejection of claims 32 and 33.

Concerning the rejection of claim 38, Applicants respectfully submit that Campbell et al. fails to teach or disclose generating a receiver specific datum for presentation in a specific type of programming presentation on the basis of information received from a processor. As discussed above with respect to the rejection of claims 2, 23 and 31, the Campbell et al. system does not generate a receiver specific datum for presentation, but instead merely permits viewing of programs or data when a proper comparison is made between codes received and codes present in the converter 40. Hence, Applicants respectfully submit that the Campbell et al. system does not anticipate their claim 38 under 35 U.S.C. § 102(e). Therefore, Applicants respectfully request that the Examiner reconsider and withdraw this rejection. Claims 39-41, which depend from claim 38, are patentable for at least the reasons proffered with respect to claim 38. Thus, Applicants respectfully request that the Examiner reconsider and withdraw the 35 U.S.C. § 102(e) rejection of claims 39-41.

Claims 9, 17, 29 and 34-37 are rejected under 35 U.S.C. § 103 as being unpatentable over Campbell et al. (Campbell) in view of Hedger. As an initial matter,

Applicants respectfully submit that Campbell et al. is not prior art as against the present application under 35 U.S.C. § 103. In the instant case, the U.S. filing date of Campbell et al. and the 102(e) date shown on the face of the patent, November 27, 1981 does not precede the asserted priority date of the present application, namely November 3, 1981. Applicant's reading of the Patent Statute is that the earlier PCT filing date, March 31, 1981, does not render Campbell et al. as prior art in this instance for purposes of 35 U.S.C. § 103. Assuming *arguendo* that Campbell et al. is a valid reference against the present application, concerning claim 9, which depends from claim 6, Applicants respectfully submit that neither Campbell et al. nor Hedger suggest or imply receiving at a remote intermediate mass medium transmitter station, an instruct signal comprising downloadable code. The Campbell et al. system, as discussed above, does not involve instruct signals, but instead relies upon comparison codes which, when properly match, permit viewing of programming and data.

Hedger discloses an arrangement for transforming a standard teletext decoder into a home computer system capable of receiving software from teletext transmissions, through the use of ORACLE. With the use of a microprocessor and extra memory, the teletext decoder would have the ability to receive programs from off-air teletext by selecting pages of teletext data carried by programs represented by teletext characters. Once a desired program has been received, the teletext decoder would execute the programs via the microprocessor. Teletext keypad commands are taken to an inport port on the microprocessor, enabling it to be used as a command and data entry device. The microprocessor scans any page loaded into a page-store for a special sequence of characters which identify the page as containing telesoftware data. The special sequence

of characters is followed by a comment field. The next row is used to send control and status information, such as program size and address. The remainder of the page contains program data. The Hedger system directly concerns receiving computer programs at a subscriber's home for use in conjunction with the subscriber's teletext terminal, and is not concerned with receiving at a transmitter station, a control signal that executes downloadable code at the subscriber's home. In fact, Hedger teaches away from this since his microcomputer only executes loaded telesoftware programs, but the telesoftware programs are run under the aegis of a resident control program that is within the microcomputer. Thus, Hedger 's telesoftware is not disclosed as either as either executing a program or being self-executing. In the Hedger system, the subscriber, at his location, must choose the telesoftware, and the choice of telesoftware is not made at the transmitter. In addition, the viewer executes the telesoftware, instead of there being a signal transmitted that executes the telesoftware.

Hence, Applicants respectfully submit that claim 9 is non-obvious over Campbell et al. in view of Hedger, because neither reference suggests or implies all of Applicants claimed limitations, and thus fails to establish a *prima facie* case of obviousness. Therefore, Applicants respectfully request that the Examiner reconsider and withdraw this rejection.

Concerning the rejection of claim 17, which depends from claim 14, Applicants respectfully submit that neither Campbell et al. nor Hedger suggest or imply transferring to a transmitter, a code or datum, and a control signal, wherein the control signal includes downloadable code. The Campbell et al. system, as discussed above, relies upon comparison codes. The comparison codes do not function as control signals,

and are not transferred to a transmitter. Moreover, the Campbell et al. comparison codes do not include downloadable code. The Hedger system, as discussed above, directly concerns receiving computer programs at a subscriber's home for use in conjunction with the subscriber's teletext terminal. The Hedger system executes loaded telesoftware programs, but the telesoftware programs are run under the aegis of a resident control program that is within the microcomputer. Hedger does not include in a telesoftware information transmission, a control signal including downloadable code. Thus, the Hedger system is not concerned with receiving at a transmitter station, a control signal that includes downloadable code.

Hence, Applicants respectfully submit that claim 17 is non-obvious over Campbell et al. in view of Hedger, because neither reference suggests or implies all of Applicants claimed limitations, and thus fails to establish a *prima facie* case of obviousness. Therefore, Applicants respectfully request that the Examiner reconsider and withdraw this rejection.

Concerning the rejection of claim 29, which depends from claim 23, Applicants respectfully submit that neither Campbell et al. nor Hedger suggest or imply transferring to a transmitter an instruct signal, and transmitting the instruct signal and a control signal to receiver stations, wherein the control signal includes downloadable code targeted to a processor in the receiver stations, and the downloadable code is effective to program the way or method in which the processor responds to the instruct signal. The Campbell et al. system does not involve transferring such an instruct signal to a transmitter, as discussed above. Moreover, the Campbell et al. system does not involve a control signal that executes downloadable code. The Hedger system, as

discussed above, is not concerned with a control signal that executes downloadable code at the subscriber's home.

Hence, Applicants respectfully submit that claim 29 is non-obvious over Campbell et al., in view of Hedger, because neither reference suggests or implies all of Applicants claimed limitations, and thus fails to establish a *prima facie* case of obviousness. Therefore, Applicants respectfully request that the Examiner reconsider and withdraw this rejection.

Concerning the rejection of claim 34, which depends from claim 31, Applicants respectfully submit that neither Campbell et al. nor Hedger suggest or imply processing instructions that are effective to generate a receiver specific datum for output in a multimedia programming representation, wherein the instructions include code. The Campbell et al. system, as discussed above, relies upon comparison codes that, when properly matched, serve as authorization to permit the viewer to receive programming and data. However, the comparison codes are not instructions that include code, but merely are a way by which programming or data is identified in the Campbell et al. converter 40 for viewing by the subscriber at his location. The Hedger approach, does not call for outputting a multimedia programming presentation, but instead merely display data upon the teletext receiver of a subscriber. According to Hedger, data is received and eventually displayed on a teletext receiver. Thus, there is no provision for outputting a multimedia programming presentation in the Hedger system.

Hence, Applicants respectfully submit that claim 34 is non-obvious over Campbell et al., in view of Hedger, because neither reference suggests or implies all of Applicants claimed limitations, and thus fails to establish a *prima facie* case of

obviousness. Therefore, Applicants respectfully request that the Examiner reconsider and withdraw this rejection.

Concerning the rejection of claim 35, Applicants respectfully submit that neither Campbell et al. nor Hedger suggest or imply communicating from an interactive mass medium program apparatus to a remote site, a selected code or a datum.

The Campbell et al. converter 40 uses data signals to control access to the system on the basis of channel, tier of service, special event and program subject matter. The converter 40 processes vertical interval text data and selected full-channel text data. A keyboard used by the subscriber, provides functional inputs for the subscriber to interface with the system. The converter 40 also allows for interfacing with two-way interactive data acquisition and control. However, the Campbell et al. converter 40 does not involve the communication of a code or a datum designating computer instructions. Instead, the converter 40 makes use of signals the control access to the system, based upon comparison, such that when a proper comparison is made, access to the systems is permitted via the converter.

The Hedger system does not involve communicating a code or datum to a remote site. Instead, the Hedger system teletext programs are routed to a teletext module which allows data and address lines to and from the page-store, to be accessible to the microprocessor. The teletext programs are handled at the subscribers location on the subscribers microcomputer, and are not further communicated beyond that point. Hedger does not provide for communicating a code or datum to an site once the telesoftware is received in the subscriber's terminal. Thus, there is no provision in Hedger for communicating a code or datum to a remote site.

Hence, Applicants respectfully submit that claim 35 is non-obvious over Campbell et al. in view of Hedger because both references fail to suggest or imply all of Applicants' claimed limitations, and thus fails to establish a *prima facie* case of obviousness. Therefore, Applicants respectfully request that the Examiner reconsider and withdraw the 35 U.S.C. § 103 rejection of claim 35.

Concerning claim 36, which depends from claim 35, Applicants respectfully submit that neither Campbell et al. nor Hedger suggest or imply, generating a receiver specific datum for presentation in a specific type of programming presentation on the basis of a delivered computer instruction, wherein information evidencing the availability, the use or the usage of the computer instruction is stored at an interactive mass medium program output apparatus or communicated to a remote data collection station.

The Campbell et al. system does not involve a computer instruction, but instead relies upon the comparison codes which, according to function to the converter 40, permit viewing of programming or data. Thus, Campbell et al. makes no provision for storage or communication of information evidencing the availability, the use or the usage of such computer instruction.

The Hedger system does not call for use of a computer instruction, but instead concerns receiving computer programs at a subscriber's home for use on the subscriber's teletext terminal. In fact, Hedger teaches away from this, because their system allows the subscriber to select what programs he wishes to receive, without storing or communication of information evidencing of the availability, the use or the usage of a computer instruction.

Hence, Applicants respectfully submit that claim 36 is non-obvious over Campbell et al. in view of Hedger because both references fail to suggest or imply all of Applicants' claimed limitations, and thus fails to establish a *prima facie* case of obviousness. Therefore, Applicants respectfully request that the Examiner reconsider and withdraw the 35 U.S.C. § 103 rejection of claim 36.

Concerning claim 37, which depends from claim 35, Applicants respectfully submit that neither Campbell et al. nor Hedger suggest or imply a method for promotion and delivery of computer instructions for use with an interactive mass medium program output apparatus, wherein the interactive mass medium program output apparatus receives downloadable code from a remote site.

The Campbell et al. system is not directed to a promotion and delivery of computer instructions for use with an interactive mass medium program output apparatus. On the contrary, the Campbell et al. system provides programming and data to subscribers upon the proper matching of comparison codes by their converter 40. Proper comparison of the codes permits the subscriber to view programming or data at the subscriber's location. Thus, the Campbell et al. system does not involve any promotion and delivery of computer instructions at the subscriber's location.

The Hedger system receives computer programs at a subscriber's home for use in conjunction with subscriber's teletext terminal, but is not concerned with promotion and delivery of computer instructions at the subscriber's location for use with an interactive mass medium program output apparatus, wherein the interactive mass medium program output apparatus receives downloadable code from a remote site. In fact, Hedger teaches away from this, because their system calls for the subscriber to

select what computer programs he wants to receive. Furthermore, Hedger boasts as an advantage, that "Each telesoftware program resides on one or more pages in the teletext database, and the system cannot distinguish these pages from any other pages in the database." Thus, since the Hedger system cannot distinguish between telesoftware and teletext, it is reasonable to conclude that the Hedger approach is not capable of using computer instructions received with downloadable code.

Hence, Applicants respectfully submit that claim 37 is non-obvious over Campbell et al. in view of Hedger because both references fail to suggest or imply all of Applicants' claimed limitations, and thus fails to establish a *prima facie* case of obviousness. Therefore, Applicants respectfully request that the Examiner reconsider and withdraw the 35 U.S.C. § 103 rejection of claim 37.

Claim 25 is rejected under 35 U.S.C. § 103 as being unpatentable over Campbell et al. (Campbell) in view of Gimple et al. (Gimple). As an initial matter, Applicants respectfully submit that Campbell et al. is not prior art as against the present application under 35 U.S.C. § 103 as discussed above. Assuming *arguendo* that Campbell et al. is a valid reference against the present application, Applicants respectfully submit that claim 25, which depends from claim 23, fails to suggest or imply receiving at a broadcast or cablecast transmitter station, a control signal which designates receiver stations, wherein the control signal identifies at least two of the receiver stations asynchronously. Thus, Applicants respectfully request that the Examiner reconsider and withdraw the 35 U.S.C. § 103 rejection of claim 25.

The Campbell et al. system does not receive a control signal at their transmitter station. Instead, programming and data is transmitted over the system, along with

codes for comparison in the subscribers' converter 40, such that when a proper comparison exists, the subscriber is permitted to view the programming or data.

Gimple et al. concerns a subscriber data distribution system, involving a control system 20, remote video distribution modules (RVDMs) a first means for translating data received from a transmission line, and a second means for translating data received from a subscriber terminal unit (STU). The first means transmits the data to the STU, and the second means translates data received from the STU and transmits the data to the transmission line. The first and the second means include both a means for isolating the transmission line from the STU, and for regenerating the data transmitted both to and from the STU. The RVDMs are coupled, via two-way subscriber drops, to a STU. Under control of the control system 20, a delay-build out 34 is used to create a delay so as to transmit data signals to the remote video distribution modules whereby it arrives in exact synchronism with signals transmitted from the RVDM to the STU. Thus, there is no provision in the Gimple et al. system for using a control signal to identify at east two receiver stations asynchronously. Instead, Gimple et al. calls for their signals to arrive in exact synchronization.

Hence, Applicants respectfully submit that claim 25 is non-obvious over Campbell et al. in view of Gimple et al. because both references fail to suggest or imply all of Applicants' claimed limitations, and thus fails to establish a *prima facie* case of obviousness. Therefore, Applicants respectfully request that the Examiner reconsider and withdraw the 35 U.S.C. § 103 rejection of claim 25.

As to the Office Action's rejection of Applicants' claim under a non-statutory non-obvious type of double patenting, Applicants strongly traverse the Examiner's

double patenting rejection on three separate grounds which are set forth in the reply brief for Serial No. 08/113,329 (Atty. Docket No. 05634.008), incorporated herein by reference. For the sake of brevity, these arguments will not be set forth herein; the Examiner is respectfully directed to the above-mentioned reply brief.

The claims in the present application are distinct from the claims in the Harvey patents. As previously mentioned, the Office Action states that the independent and distinct standard was the main factor in the Schneller court's determination that the double patenting rejection should be affirmed. The Office Action has misinterpreted this phrase. This phrase means independent 'or' distinct. M.P.E.P. (6th ed.) § 802.01. The M.P.E.P. defines independent as meaning "that there is no disclosed relationship between the two or more subjects disclosed" and that they are not connected. The M.P.E.P. defines the term distinct as meaning that "two or more subjects disclosed are related . . . but are capable of separate manufacture, use, or sale as claimed . . . ." Two or more subjects cannot then be unrelated, independent, and also related, and thus distinct. Analyzing the USPTO's cited representative claims referenced in the Office Action, the claims of the present application are clearly distinct from the claims in the patents and therefore the claims in the present application are patentable. Although not required, Applicants will analyze the claims of the present application with respect to the designated representative claims of Harvey et al. U.S. Patents 4,694,490 and 4,704,725.

i. First representative claims, U.S. patent 4,694,490, claim 7 covering present application claim 23.

Patent 4,694,490, claim 7 claims a method of communicating television program material, said material including a video signal containing a television program and an

instruct-to-overlay signal, to multiple receiver stations. The video signal is received and the instruct-to-overlay signal detected and processed by a computer. The computer generates and transmits its overlay video signals to a television receiver which presents a combined display of the television program and overlay video signals, said display specific to a specific user. Present application claim 23 relates to a method of controlling at least one of a plurality of receiver stations. Patent claim 7 does not cover present application claim 23. The two claims are capable of separate manufacture, use, and sale as claimed. These two inventions are distinct.

U.S. patent 4,694,490, claim 7	**Present application claim 23 (Amended)**
In a method of communicating television program material to a multiplicity of receiver stations each of which includes a television receiver and computer, the computers being adapted to generate and transmit overlay video signals, to their associated television receivers, said overlay signals causing the display of user specific information related to said program material, and with at least some of said computers being programmed to process overlay modification control signals so as to modify the overlay video signals transmitted to their associated receivers, each of said computers being programmed to accommodate a specific user application, and wherein a video signal containing a television program signal and an instruct to-overlay signal are transmitted to said receiver stations, the steps of: receiving said video signal at a plurality of receiver stations and displaying said program material on the video receivers of selected ones of said plurality of receiver stations detecting the presence of said instruct-to-overlay signal at said selected receiver	A method of controlling at least one of a plurality of receiver stations each of which includes at least one of a broadcast and a cablecast signal receiver, at least one processor, a signal detector adapted to receive signals from a transmitter, said processor being programmed to respond to signals from said signal detector, said method comprising the steps of: receiving at at least one of a broadcast and a cablecast transmitter station at least one instruct signal which is effective at said at least one of said plurality of receiver stations to generate at least one receiver specific datum for presentation in a specific type of programming presentation; transferring said at least one instruct signal from said at least one of a broadcast and a cablecast transmitter station to at least one transmitter; receiving at least one control signal at said at least one of said broadcast and said cablecast transmitter station, said at least one control designating said at least one of said plurality of receiver stations; and transferring said at least one control signal to said at least one

stations at a time when the corresponding overlay is not being displayed, and coupling said instruct-to-overlay signal to the computers at said selected receiver stations, and causing the computers at said selected receiver stations to generate and transmit their overlay video signals to their associated television receivers in response to said instruct-to-overlay signal, thereby to present a combined display at the selected receiver stations consisting of the television program and the related computer generated overlay, the overlays displayed at a multiplicity of said receiver stations being different, with each display specific to a specific user.	transmitter, said at least one transmitter transmitting said at least one instruct signal and said at least one control signal to said plurality of receiver stations.

ii. Second representative claims, U.S. patent 4,704,725, claim 3 covering present application claim 23.

Patent 4,704,725, claim 3 claims a method of communicating output signals comprising data and user specific signals at a multiplicity of receiver stations from computers to output devices. At least some of the computers can modify the user specific signals by processing modification control signals. The computers communicate the data and user specific signals in response to a received and detected instruct-to-transmit signal. Present application claim 23 relates to a method of controlling at least one of a plurality of receiver stations. Patent claim 3 does not cover present application claim 23. The two claims are capable of separate manufacture, use, and sale as claimed. These two inventions are distinct.

U.S. patent 4,704,725, claim 3	**Present application claim 23 (Amended)**
A method of communicating data to a multiplicity of receiver stations each of which includes a computer adapted to generate and transmit user specific signals to one or more associated output devices,	A method of controlling at least one of a plurality of receiver stations each of which includes at least one of a broadcast and a cablecast signal receiver, at least one processor, a signal detector adapted to

with at least some of said computers being programmed to process modification control signals so as to modify the user specific signals transmitted to their associated output devices, each of said computers being programmed to accommodate a special user application, comprising the steps of:

transmitting an instruct-to-transmit signal to said computers at a time when the corresponding user specific information is not being transmitted to an output device;

detecting the presence of said instruct-to-transmit signal at selected receiver stations and coupling said instruct-to-transmit signal to the computers associated with said selected stations, and

causing said last named computers to generate and transmit their user specific signals to their associated output devices in response to said instruct-to-transmit signal, thereby to transmit to the selected output devices an output signal comprising said data and said related user specific signals, the output signals at a multiplicity of said output devices being different, with each output signal specific to a specific user.

receive signals from a transmitter, said processor being programmed to respond to signals from said signal detector, said method comprising the steps of:

receiving at at least one of a broadcast and a cablecast transmitter station at least one instruct signal which is effective at said at least one of said plurality of receiver stations to generate at least one receiver specific datum for presentation in a specific type of programming presentation;

transferring said at least one instruct signal from said at least one of a broadcast and a cablecast transmitter station to at least one transmitter;

receiving at least one control signal at said at least one of said broadcast and said cablecast transmitter station, said at least one control designating said at least one of said plurality of receiver stations; and

transferring said at least one control signal to said at least one transmitter, said at least one transmitter transmitting said at least one instruct signal and said at least one control signal to said plurality of receiver stations.

iii. Third representative claims, U.S. patent 4,965,825, claim 24 covering present application claim 23.

Patent 4,965,825, claim 24 claims a method of generating user specific output information at a multiplicity of receiver stations. Each receiver station is programmed with a special user application and has a computer adapted to generate user specific output information. Each receiver station has an output device to which its computer transmits a user specific signal. At a time when the user specific output information does not exist, an instruct-to-generate signal is transmitted to the receiver stations. In response to the instruct-to-generate signal, the computers generate and transmit to the

output devices the user specific output information in user specific signals which are different, "with each output signal specific to a specific user". Present application claim 23 relates to a method of controlling at least one of a plurality of receiver stations. Patent claim 24 does not cover present application claim 23. The two claims are capable of separate manufacture, use, and sale as claimed. These two inventions are distinct.

U.S. patent 4,965,825, claim 24	**Present application claim 23 (Amended)**
In a method of generating computer output at a multiplicity of receiver stations each of which includes a computer adapted to generate and transmit user specific output information content and user specific signals to one or more associated output devices, with at least one or more associated output devices, with at least some of said computers being programmed to process modification control signals so as to modify said computers' method of processing data and generating output information content, each of said computers, being programmed to accommodate a special user application, the steps of: transmitting an instruct-to-generate signal to said computers at a time when corresponding user specific output information content does not exist, and causing said last named computers to generate their user specific output information content in response to said instruct-to-generate signal, thereby to transmit to each of their associated output devices an output information content and the user specific signal of its associated computer, the output signals at a multiplicity of said output devices being different, with each output signal specific to a specific user.	A method of controlling at least one of a plurality of receiver stations each of which includes at least one of a broadcast and a cablecast signal receiver, at least one processor, a signal detector adapted to receive signals from a transmitter, said processor being programmed to respond to signals from said signal detector, said method comprising the steps of: receiving at at least one of a broadcast and a cablecast transmitter station at least one instruct signal which is effective at said at least one of said plurality of receiver stations to generate at least one receiver specific datum for presentation in a specific type of programming presentation; transferring said at least one instruct signal from said at least one of a broadcast and a cablecast transmitter station to at least one transmitter; receiving at least one control signal at said at least one of said broadcast and said cablecast transmitter station, said at least one control designating said at least one of said plurality of receiver stations; and transferring said at least one control signal to said at least one transmitter, said at least one transmitter transmitting said at least one instruct signal and said at least one control signal to said plurality of receiver stations.

iv. Fourth representative claims, U.S. patent 5,109,414, claim 15 covering present application claim 23.

Patent 5,109,414, claim 15 claims a signal processing system which receives data from a data source and outputs the data to a matrix switch and a detector, control signals are detected within the received data and stored for further processing, and a processor controls the directing functions of (1) the matrix switch which receives the data as input and can direct selected portions of the data to a data transmission means and (2) the device which stores and transfers the control signals to the processor. Present application claim 23 relates to a method of controlling at least one of a plurality of receiver stations. Patent claim 15 does not cover present application claim 23. The two claims are capable of separate manufacture, use, and sale as claimed. These two inventions are distinct.

U.S. patent 5,109,414, claim 15	Present application claim 23 (Amended)
In a signal processing system, a receiver/distribution means for receiving data from a data source and for outputting said data to a matrix switch means and a control signal detector means, a matrix switch means for receiving said data from said receiver/distributor means and for directing selected portions of said received data to a data transmission means, a control signal detector means for detecting control signals respecting said data and transferring said control signals to a storage/transfer means, said control signal means being configured to detect said control signals at a predetermined location within said data, a storage/transfer means for receiving and storing said control signals and for transferring at least a portion of said control signals to a processor means for further processing, and	A method of controlling at least one of a plurality of receiver stations each of which includes at least one of a broadcast and a cablecast signal receiver, at least one processor, a signal detector adapted to receive signals from a transmitter, said processor being programmed to respond to signals from said signal detector, said method comprising the steps of: receiving at at least one of a broadcast and a cablecast transmitter station at least one instruct signal which is effective at said at least one of said plurality of receiver stations to generate at least one receiver specific datum for presentation in a specific type of programming presentation; transferring said at least one instruct signal from said at least one of a broadcast and a cablecast transmitter station to at least one transmitter; receiving at least one control signal

a processor means for controlling the directing functions of said matrix switch means and the transfer functions of said storage/transfer means based on instructions contained in said control signals.

at said at least one of said broadcast and said cablecast transmitter station, said at least one control designating said at least one of said plurality of receiver stations; and

transferring said at least one control signal to said at least one transmitter, said at least one transmitter transmitting said at least one instruct signal and said at least one control signal to said plurality of receiver stations.

Concerning paragraph 22 of the Office Action, Applicants acknowledge and appreciate the interviews provided by the USPTO. Applicants also appreciate the detailed description of the interviews provided in the Office Action. Paragraph 22 of the Office Action further states that "[t]he Group would like to have a complete grouping of applications in a manner that was submitted earlier for only a portion of the total filings." Applicants note that based on the Office Actions received thus far, the USPTO does not appear to be following the groupings Applicants submitted previously. The order of examination of Applicants' applications do not seem to have any correspondence to the groupings previously submitted. Applicants, therefore, will not supply further groupings. Applicants will, however, gladly supply further groupings if requested by the USPTO for the purpose of following these groupings. Mr. Groody has confirmed in a telephone conversation between Mr. Groody and Mr. Scott that no more groupings need be sent.

In the interest of maintaining a clear record, Applicants respectfully traverse the Office Action's interview summary statement that an offer was made to terminally disclaim the present application with the '81 or '87 patents. Rather, Applicants

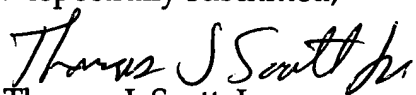
respectfully submit that their offer was to disclaim a block of copending applications against one another, provided their issue date was in close enough proximity so as not to result in unnecessarily great losses in patent term duration.

Responsive to the Notice of Draftperson's Patent Drawing Review found on Form PTO 948, Applicants will make necessary and appropriate drawing corrections upon the indication of allowable subject matter.

Based upon the foregoing, Applicants respectfully submit that all outstanding objections and rejections have been overcome and/or rendered moot. Further, it is respectfully submitted that the now pending claims 2-41 are patentably distinguishable over the prior art of record, taken either singularly or in any reasonable combination. Thus, there being no further outstanding objections or rejections, the application is submitted as being in a condition for allowance, which action is earnestly solicited.

If the Examiner has any remaining informalities to be addressed, it is believed that prosecution can be expedited by the Examiner contacting the undersigned attorney for a telephone interview to discuss resolution of such informalities.

Respectfully submitted,



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